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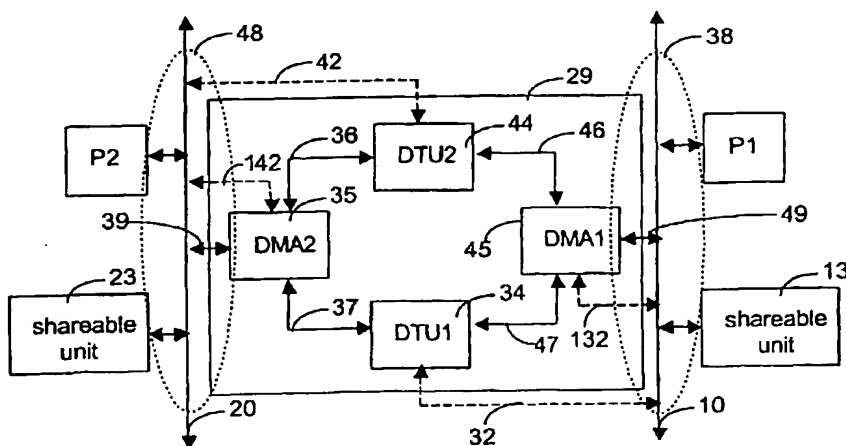
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(54) Title: **IMPROVED INTER-PROCESSOR COMMUNICATION SYSTEM FOR COMMUNICATION BETWEEN PROCESSORS**



(57) Abstract: System comprising at least two integrated processors (P1 and P2). These two processors (P1 and P2) are operably connected via two bi-directional communication channels for exchanging information. For establishing the bi-directional communication channels, the system comprises a first processor bus (10) to which the first processor (P1) is connected, a first direct memory access unit (45), a first programmable unit (34), and a first shareable unit (13). The programmable unit (34) can be programmed by the first processor (P1). Also comprised is a second processor bus (20), the second processor (P2) being connectable to the second processor bus (20), a second direct memory access unit (35), and a second programmable unit (44). Said second programmable unit (44) is programmable by the second processor (P2).